

# ABSTRACT

**Title:** Comparison of postural stability by repeated provocative test "3 steps, single leg stance" on Posturomed<sup>1</sup> in a group of people with and without hypermobility syndrome.

**Aim of the work:** The aim of my work was to find a specific parameter for people with joint hypermobility syndrome in repeated provocative test "3 steps, single-leg stance" on Posturomed, if there is any. And if the ability of postural stabilization of people with hypermobility syndrome is worse or different than from without hypermobility.

**Methods:** This study is dealing with 2 groups of 10 women. The first group contains women with diagnosis of joint hypermobility and they are compared with the control group without diagnosis of joint hypermobility syndrome. The Beighton score is used to make the diagnosis of benign joint hypermobility syndrome and also by measurement of the range of movement in a important joints. Then all probands were tested on Posturomed by the "3 steps, single leg stance" test in the standard conditions. The records of accelerometer measurement were analysed in Microswing programm - "Stand-Schritt Messung" written by Haider Bioswing<sup>2</sup>. In next phase data were processed in a programme PostPropriomed Commander<sup>3</sup> and in Microsoft Excel.

**Results:** The way of resulting wasn't clear-cut at all, but you might say that the ability of the postural stabilization could be in the control group in average better. The specific parameter for the hypermobility group wasn't definite found yet.

**Key words:** stability, postural stabilization, posturomed, "3 steps, single leg stance" test, PostPropriomed Commander, hypermobility, hypermobility test

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<sup>1</sup> Posturomed - <http://www.bioswing.de/de/products/therapiegeraete/posturomed/>

<sup>2</sup> Haider - Microswing - <http://www.bioswing.de/de/products/messsysteme/microswing/>

<sup>3</sup> by Roman Melecky (2008)